



VOC Monitoring in Wisconsin - Which Analytes are Required?

Many of the DNR's regulatory programs require monitoring for volatile organic compounds (VOCs). There are literally hundreds of different compounds that fall into this class of compounds. To assist laboratories doing volatiles work, the Laboratory Certification Program has put together the following list of commonly requested volatile organics. A laboratory could routinely monitor for these 68 VOCs and cover all DNR programs except solid waste assessment monitoring, wastewater permit applications, and Appendix 9 of the federal hazardous waste code. The 68 "common" VOCs are:

Acetone	Dichloroethane (1,1-)	Trichloropropane (1,2,3-)
Benzene	Dichloroethane (1,2-)	Trimethylbenzene (1,2,4-)
Bromobenzene	Dichloropropane (1,2-)	Trimethylbenzene (1,3,5-)
Bromodichloromethane	Dichloropropane (1,3-)	Trichloro (1,1,2)
Bromoform	Dichloropropane (2,2-)	trifluoroethane (1,2,2)
Bromomethane (Methyl bromide)	Dichloropropene (cis+trans, 1,3-)	Vinyl Chloride
Butylbenzene (n)	Dichloropropylene (1,1-)	Xylenes, Total
Butylbenzene (sec)	Ethylbenzene	
Butylbenzene (tert)	EDB [1,2-Dibromoethane, ethylene dibromide, dibromoethane]	
Carbon Disulfide	Hexachlorobutadiene	
Carbon Tetrachloride	Hexane (n-Hexane)	
Chlorobenzene	Isopropylbenzene	
(Monochlorobenzene)	Isopropyltoluene (p)	
Chloroethane (Ethyl chloride)	Methyl ethyl ketone (MEK, 2-Butanone)	
Chloroform	Methyl isobutyl ketone (MIBK, 4-methyl-2-pentanone)	
Chloromethane (Methyl chloride)	Methyl tert-butyl ether (MTBE, 2-methoxy-2-methylpropane)	
Chlorotoluene (2-)	Methylene Chloride [Dichloromethane]	
Chlorotoluene (4-)	Naphthalene	
Di-isopropyl ether [isopropyl ether]	Propylbenzene (n)	
Dibromochloromethane (Chlorodibromomethane)	Styrene (Ethenylbenzene)	
DBCP	Tetrachloroethane (1,1,1,2-)	
[1,2-Dibromo-3-chloropropene, dibromochloropropane]	Tetrachloroethane (1,1,2,2-)	
Dibromomethane (Methylene bromide)	Tetrachloroethylene (Perchloroethylene)	
Dichlorobenzene (1,2-)	Tetrahydrofuran	
[o-dichlorobenzene]	Toluene	
Dichlorobenzene (1,3-)	Trichlorobenzene (1,2,3-)	
[m-dichlorobenzene]	Trichlorobenzene (1,2,4-)	
Dichlorobenzene (1,4-)	Trichloroeth(yl)ene [TCE]	
[p-Dichlorobenzene]	Trichloroethane (1,1,1-)	
Dichlorodifluoromethane (Freon 12)	Trichloroethane (1,1,2-)	
Dichloroeth(yl)ene (1,1-)	Trichlorofluoromethane	
Dichloroeth(yl)ene (cis-1,2-)	(Freon 11)	
Dichloroeth(yl)ene (trans-1,2-)		

An additional 20 VOCs are covered by the solid waste assessment monitoring, wastewater permit application, and Appendix 9 of the federal hazardous waste code. These VOCs include:

Acetonitrile
Acrolein
Acrylonitrile
Allyl Chloride
(3-chloropropene)
Bromochloromethane
Chloroprene
Dichloro-2-butene
(trans-1,4-)
Dichloropropene (2,3-)
Dioxane (1,4-) [p-Dioxane]
Ethyl Methacrylate
Hexanone (2-) (Methyl butyl ketone)
Isobutyl Alcohol
Methacrylonitrile
Methyl iodide
Methyl methacrylate
N-Nitroso-di-n-butylamine
Nitrobenzene
Picoline (2-)
Toluidine (o-)
Vinyl Acetate